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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,813

03/17/2004

Shinji Ikeda

02-114

2521

23400 7590 08/01/2006

POSZ LAW GROUP, PLC
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RESTON, VA 20191

EXAMINER

TRINH, MINH N

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,813

Applicant(s)

IKEDA, SHINJI

Examiner

Minh Trinh

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/17/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The abstract of the invention should have been revised to reflect the method invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

At least claims 1, 3-6 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hara et al (JP 404030901).

Hara et al disclose a method recited in claim 1 comprising: rotating an unfinished commutator product 1 about a central axis of the unfinished commutator product, wherein the unfinished commutator product 1 includes a plurality of commutator segments, each of which axially extends along an outer peripheral surface of the unfinished commutator product between a first axial end and a second axial end of the unfinished commutator product and includes a coil connection at a location adjacent the second axial end of the unfinished commutator product (see Figs 1-3, and the discussed in the abstract); and

axially moving at least one of a cutting means 3's and the unfinished commutator product to create relative movement of the cutting means along a cutting region of the outer peripheral surface of the unfinished commutator product from the first axial end of

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the unfinished commutator product toward the second axial end of the unfinished commutator product while the unfinished commutator product is rotated, so that an outer surface of each commutator segment is cut to a cutting operation end (see Figs. 1-3)

wherein, the cutting operation start point of each commutator from a cutting operation start point of each commutator segment is located in the first end of the unfinished commutator, the cutting operation end point of each commutator segment is located adjacent the coil connection of the commutator segment between the cutting operation start point and the coil connection (see Fig. 1B, shows the process from starting and finishing end point at A, as shown and indicated by an arrow), and

a feed rate of the cutting means, which is an axial relative moving distance of the cutting means along the outer peripheral surface of the unfinished commutator product per revolution of the unfinished commutator product, is reduced in an end part of the cutting region, which includes the cutting operation end point and a section of the cutting region adjacent the cutting operation end point, in comparison to that of the rest of the cutting region (as indicated in Figs 1B and 3). Note that the applied reference does disclose that the cutting by rotating mean 34 operatively associated therefrom (see Fig. 3).

As applied to claim 3-5, it is inherent that the rate of speed would be increase or decrease dependent upon the setting of the tool which including cutting factors of start and stop and the depth of the cut and so on.

Limitations of claims 7-8 are also met as the above discussion.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al (JP 404030901).

Regarding the cutting rate as speed with in range of 0.001-0.012mm/revolution as recited in claim 2, it would have been an obvious matter of design choice to choose any desired cutting speed since applicant has not disclosed that cutting within this particular range is critical, patentably distinguishing feature and it appears that the invention would perform equally well with the rate and/or speed of cutting as taught by the prior art reference which is substantially less than 1mm per revolution (see Figs. 1-3).

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited for their teaching of method for forming commutator or the like.

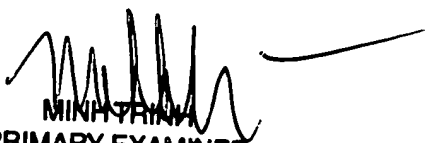
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mt

7/19/06


MINH TRINH
PRIMARY EXAMINER